

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/DK2005/000036

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7    B01F3/08    B01F7/00    B01F5/10    B01F5/02    B01F5/20 B01F11/02    B01F5/04 //B01J3/00, B05D1/02, B01D11/02 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 7    B01F    B01J    B05D    B01D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 850 682 A (INOUE MFG., INC) 1 July 1998 (1998-07-01)	1-11,20, 21, 23-26, 42, 44-46, 60-63, 79,80, 96, 107-109 12,13
Y	column 1, line 7 - line 17 column 1, line 56 - column 2, line 25 column 8, line 11 - line 55 column 9, line 44 - line 56 column 10, line 53 - column 11, line 15 column 12, line 42 - line 46 figures 1,2,6 <div style="text-align: center; margin-top: 10px;">----- -/--</div>	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>* Special categories of cited documents :</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search		Date of mailing of the international search report
11 May 2005		25. 07. 2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  Real Cabrera, R

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 095 134 A (SIEVERS ET AL) 1 August 2000 (2000-08-01) column 1, line 13 - line 16 column 2, line 40 - line 45 -----	12,13

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-13, 20, 21, 23-26, 42, 44-46, 60-63, 79, 80, 96, 107-109

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13,20,21,23-26,42,44-46,60-63,79,80,96,107-109  
Use as one of the fluids CO<sub>2</sub> containing a co-solvent.  
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2. claims: 14-19 (dependent claim 14 as 'a posteriori' non-unity)  
Use as one of the fluids CO<sub>2</sub> containing a surfactant.  
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3. claims: 22 (dependent claim 22 as 'a posteriori' non-unity)  
Pressurized vessel operating at constant pressure.  
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4. claims: 27 (dependent claim 27 as 'a posteriori' non-unity)  
Continuous discharge.  
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5. claims: 28 (dependent claim 28 as 'a posteriori' non-unity)  
Fluid withdrawn used to dissolve/extract substances.  
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6. claims: 29,30 (dependent claim 29 as 'a posteriori' non-unity)  
Water cores containing dissolved/disperse substance.  
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7. claims: 31-35,39,40 (dependent claim 31 as 'a posteriori' non-unity)  
Forming two separate emulsions.  
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8. claims: 36-38,41 (dependent claim 36 as 'a posteriori' non-unity)  
Microemulsion used as nanoreactor.  
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9. claims: 43 (dependent claim 43 as 'a posteriori' non-unity)  
Pressure control in recirculation loop.  
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10. claims: 47-51,56-59,66 (dependent claim 47 as 'a posteriori' non-unity)  
Pressure container in recirculation loop.  
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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

11. claims: 52-55 (dependent claim 52 as 'a posteriori' non-unity)

Ultrasonic generator in recirculation loop.

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12. claims: 64,65 (dependent claim 64 as 'a posteriori' non-unity)

Atomizing nozzles in pressurised vessel.

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13. claims: 67,68 (dependent claim 67 as 'a posteriori' non-unity)

Surfactant added in pressurised container.

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14. claims: 69-78 (dependent claim 69 as 'a posteriori' non-unity)

Use of hollow tubular membranes in pressure vessel.

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15. claims: 81-95,101,102 (dependent claim 81 as 'a posteriori' non-unity)

Use of microemulsion to be deposited on a substrate surface.

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16. claims: 97 (dependent claim 97 as 'a posteriori' non-unity)

Use for microencapsulation of particles.

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17. claims: 98,99 (dependent claim 98 as 'a posteriori' non-unity)

Use for dispersing particles in solvent.

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18. claims: 100,106 (dependent claim 100 as 'a posteriori' non-unity)

Particles formed comprising pharmaceutical/biological material.

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19. claims: 103-105 (dependent claim 103 as 'a posteriori' non-unity)

Particles comprising an oxide.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

Internat

Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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